

GIANT SIGMOID MESOCOLIC LYMPHATIC CYST PRESENTING AS ACUTE ABDOMEN IN A CHILD: CASE REPORT

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ABSTRACT

Abdominal lymphatic cyst is a rare benign cystic lesion that most commonly affects pediatric age group and are mostly seen arising from small bowel mesentery, sigmoid mesocolon being the rarest site of origin. We report a rare case of giant lymphatic cyst arising from sigmoid mesocolon in a 10-year-old boy presenting with huge painful abdominal mass. Diagnostic imaging revealed a large fluid filled cystic lesion with septations occupying whole of the peritoneal cavity. We managed the case by laparotomy with total excision of mass and histopathology confirmed the diagnosis of lymphatic cyst with haemorrhage in few loculi.

Keywords: Giant, Lymphatic cyst, Pediatric, sigmoid mesocolon,

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INTRODUCTION

Abdominal lymphatic cyst is a rare benign malformation of lymphatic system. Lymphatic cysts mostly arise from small bowel mesentery followed by omentum and sigmoid mesocolon is the rarest site¹. Childhood lymphatic malformations can affect any part of the body but most commonly affect neck (75%) followed by axillary region (20%) with peritoneum, retroperitoneum and mediastinum accounting for 5%². Abdominal lymphatic malformations most commonly seen in pediatric age group with male predominance¹. Presentation varies from asymptomatic palpable mass to acute

abdomen due to haemorrhage causing sudden increase in size of cyst, intestinal obstruction or volvulus. We report a rare case of giant lymphatic cyst arising from sigmoid mesocolon in a 10-year-old male child presenting with huge painful acute abdominal mass.

CASE REPORT

A 10-year-old male child presented with huge painful abdominal mass to our hospital. Patient had asymptomatic vague abdominal mass since childhood and developed severe abdominal pain ten days back during skipping. On physical examination, there was a large tender

cystic mass occupying whole abdomen (Fig-1). Routine investigations like complete hemogram and renal function tests were within normal limits. Plain X-ray abdomen showed a soft tissue mass displacing the bowel loops upwards and peripherally. Ultrasound revealed a large cystic lesion with echoes and internal septations extending from pelvis to epigastrium. CT revealed a large well defined lesion of fluid density with internal septations in peritoneal cavity and displacing bowel loops superiorly and laterally. In pelvis, the lesion was posterior to urinary bladder and adjacent to rectum on left side. On post contrast study lesion showed enhancement of internal septations and peripheral wall (Fig-2). Radiologically first diagnosis was giant mesenteric cyst likely lymphangioma.

After resuscitation patient underwent explorative laparotomy through a right supraumbilical muscle cutting transverse incision. Just below the peritoneum there was a large lobulated cystic lesion measuring approximately 25X25 cm arising from sigmoid mesocolon in pelvis with extension from presacral space to epigastrium (Fig-3). The mass was excised in toto and drain was kept before closing the abdomen in layers. Postoperative period was unremarkable and he was discharged on 8th post op day. Specimen was sent for histopathological examination and final diagnosis was multilocular lymphatic cyst with haemorrhage in few loculi.



Fig 1. Preoperative picture showing a giant mass

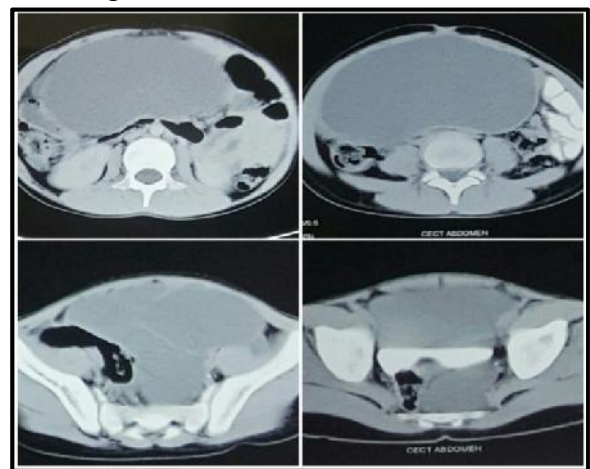


Fig 2. CT showing fluid density cystic lesion just beneath anterior abdominal wall with peripheral wall enhancement internal septations.



Fig 3. Peroperative pictures of lobulated lymphatic cyst.

DISCUSSION

Abdominal lymphatic cyst is an uncommon congenital benign cyst occurring due to lymphatic malformation. As per classification of abdominal cysts based on their origin and histopathological features they are of: (a) lymphatic origin (b) mesothelial origin (c) dermoid cyst (d) enteric and duplication cyst (e) urothelial origin (f) pseudocyst.³ Abdominal cysts of lymphatic origin are of two types: cystic lymphangioma and lymphatic cyst. Both terms are used interchangeably but the difference lies in their histology. Cystic lymphangiomas have a lining of endothelium and smooth muscles while there is no smooth muscle lining in lymphatic cyst.⁴ Cystic lymphangioma has the tendency to recur while lymphatic cyst does not.⁴

In abdomen, sigmoid mesocolon is the rarest site for lymphatic malformations. Batool T et al reported a case of giant lymphatic cyst of transverse mesocolon.⁵ Many theories have been proposed for its etiopathogenesis like inadequate drainage of lymphatic system or benign proliferation of ectopic lymphatic tissue but majority of cases are idiopathic.⁶ The patient can be asymptomatic, may present with abdominal distension, fullness or with acute abdomen due to volvulus, intestinal obstruction, haemorrhage in cyst or rupture.⁵ Ultrasound and CT scan plays a very important role in the preoperative diagnosis. Ultrasound is the first imaging modality to be used in these cases. CT further helps in better characterisation, extent of lesion and its relationship with surrounding organs.

Definite treatment of lymphatic cyst is complete surgical excision. In some cases, where the lesion has involved gut loops then resection of as small gut loop as possible should be done along with lesion.⁷ As per recent advances sclerotherapy or laparoscopic surgeries are alternative.¹ In our case cyst was excised completely in toto with open laparotomy. A regular follow up is advised in such cases to detect any recurrence. Lymphatic cysts although rare however must be diagnosed and managed early to prevent complications.

CONCLUSION

Abdominal lymphatic cyst although rare but must be kept in mind. Our case was rare as it was a giant mass arising from the leaves of sigmoid mesocolon and presented with acute abdomen due to haemorrhage in it. So such kind of entities must be kept in mind as if they are left untreated, they can result in catastrophic events.

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